



Tri-Service Medical Information Symposium 2012

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Tri-Service Medical Information Symposium 2012



NAVMED C&A: Roles and Responsibilities

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NAVMISSA EIA & BUMED M62
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Learning Objectives



1. Explain the Enterprise Information Assurance (EIA) Program, how it facilitates the Certification & Accreditation (C&A) process, and why it is important
2. Discuss the Roles and Responsibilities during the C&A process
3. Discuss Navy Medicine's use of reciprocity within the C&A process



Purpose



- To ensure the audience understands how the various Information Assurance (IA) stakeholders within Navy Medicine (NAVMED) execute the C&A process
- To help the audience better understand each critical role in the C&A process and what their actions and responsibilities are during each phase of the C&A process
- Ensure the audience understands how Navy Medicine processes reciprocity package submissions, and to provide explanations for some common misunderstandings with “reciprocity”



Business Issue



- **The Problem:** C&A process participants are often times unclear on what their role and/or responsibilities are during the NAVMED C&A process
 - The C&A process is very long and tedious
 - It requires inter-organizational dependencies that are often unclear or ill-defined at various points in the process
- **Business Value or Benefits:** Increased awareness of the C&A process and the associated roles within the defined C&A project tasks
 - Ensuring clear ownership of the various C&A project tasks during the C&A process
 - Improved communication between inter- and intra-organizational teams
 - Improved accountability for C&A project tasks



Background



- NAVMISSA EIA program has evolved over the years to meet the needs of the Enterprise
- NAVMISSA EIA Program is comprised of 10 main project areas:
 - Directives Verification and Validation (DV&V)
 - EIA Functional Systems Support
 - Incident Detection, Prevention, and Analysis (IDP&A)
 - Continuous Risk Management
 - **Certification & Accreditation (C&A) Support**
 - Information Technology Contingency Planning (ITCP)
 - Compliance Support
 - Governance Support
 - Controls Verification and Validation (CV&V)
 - IA Support for Medical Systems
- Each project plays a role in maintaining a healthy IA posture for the NAVMED Enterprise and supporting the C&A process



Background



- What is Certification and Accreditation (C&A)?
 - Standard two pronged approach, “C & A”, is used by the Department of Defense (DoD) to:
 - Identify information security requirements
 - Manage the security of DoD information systems
- What is ‘Certification’?
 - The comprehensive evaluation of the technical and non-technical security safeguards of an information system (IS)
 - Used to support the accreditation process
- What is ‘Accreditation’?
 - Formal declaration by an approving authority that an IS is compliant
 - Declaration based on the established security requirements
 - Approval to operate using a prescribed set of safeguards
 - Granted in the form of a Navy Authority to Operate (ATO), Interim Authorization to Operate (IATO), or Interim Authority to Test (IATT)



Background



- What are the goals of C&A?
 - Provide standardization of systems and security solutions
 - Decrease the level of risk of operating a system
 - Reduce the overall cost of operating a system
- Why is it important to you?
 - It's required...
 - DoD Instruction 8510.01, November 28, 2007, "DoD Information Assurance Certification and Accreditation Process (DIACAP)"
 - Department of the Navy, DIACAP Handbook Version 1.0, July 15, 2008
 - The C&A process is the path to obtain ATO for your system/site within the Navy Medicine enterprise
 - Documents that your system/site is operating at an acceptable level of risk and is doing so all while adhering to all applicable security controls



Background



- Primary Roles in C&A Process
 - Operational Designated Approval Authority (ODAA) – Mr. Charles Kiriakou
 - Formerly Naval Network Warfare Command (NNWC)
 - Command realignment to U.S. Fleet Cyber Command (FLT CYBERCOM)
 - Certifying Authority (CA) – Mr. Paul Hilton
 - Space and Naval Warfare Systems Command (SPAWAR), 05
 - DIACAP Validator
 - Program Manager (PM)
 - User Representative (UR)
 - NAVMED CIO – Mr. Verlin Hardin
- Important to ensure roles are clearly defined
- Each signature is critical to obtain approval from ODAA



Background



- Roles span multiple organizations within Navy Medicine, each has a critical part
 - Enclave and Program Stakeholders
 - Information Assurance Manager (IAM), IA Officer (IAO), Program Manager(s), Information Systems Officers (ISO), etc.
 - Regional Stakeholders
 - Regional Information Systems Officer (RISO)
 - NAVMISSA EIA Program
 - C&A staff
 - BUMED CIO staff
 - M62 IA
 - Navy Certification Authorities
 - Navy CA/ODAA staff



Scope



- **Define:** The C&A process applies to all Navy Medicine enclaves (sites), programs of record (PORs) and stand-alone information systems
- **Intent use:** Enhanced awareness of the C&A process and responsibility of each stakeholder will:
 - Improve process efficiency and cycle time
 - Reduce overall cost of process
 - Ensure improve process accountability at all levels



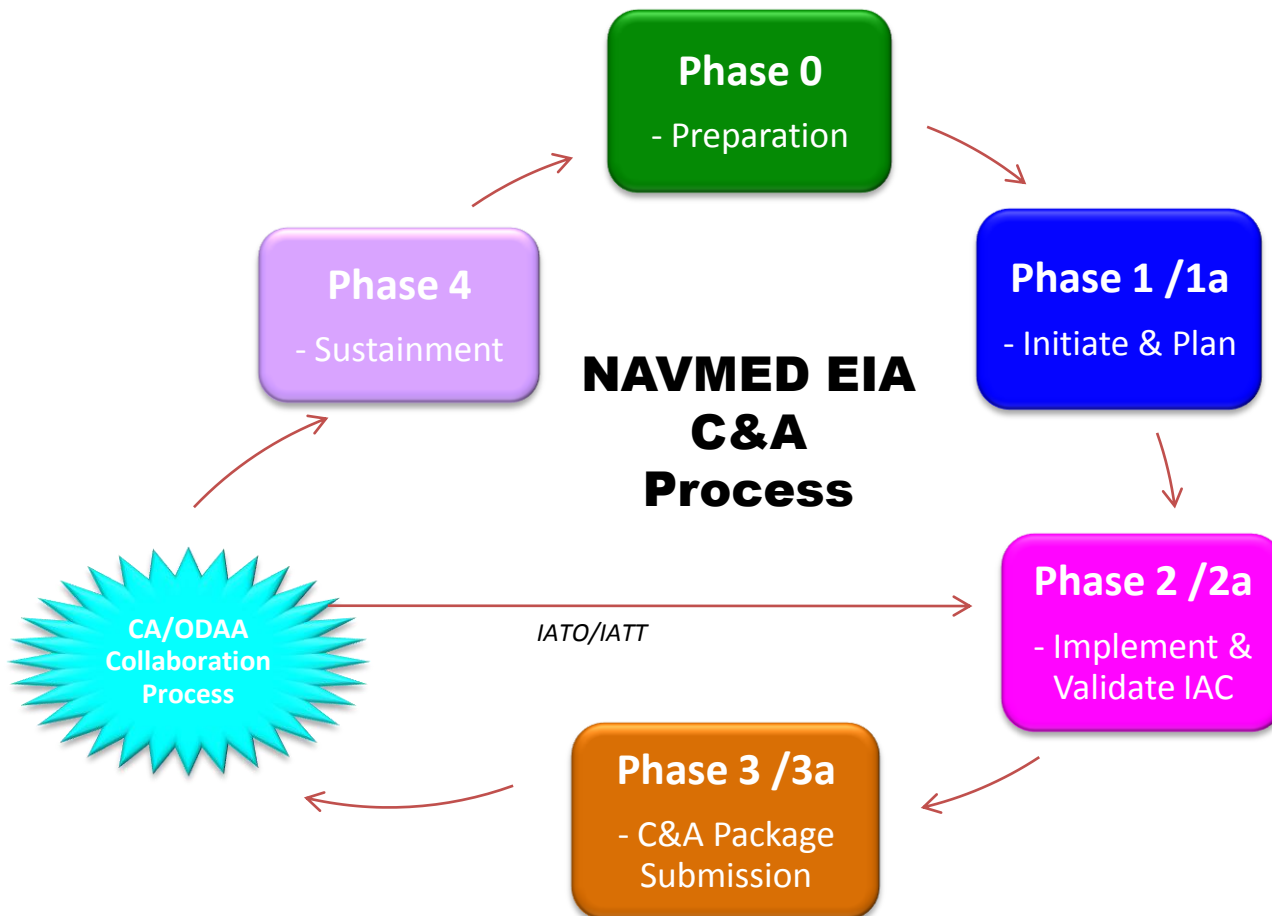
Policies and Guidance



- Department of Defense Instruction (DoDI) 8510.01 - DoD Information Assurance Certification and Accreditation Process (DIACAP), November 2007
- DoDI 8500.2 Information Assurance (IA) Implementation, February 2003
- OPNAV Instruction 5239.1c, Navy IA Program, August 2008
- CJCSI 6211.02C, Defense Information System Network: Policy and Responsibility, July 2008
- CJCSI 6510.01F, IA and Support to Computer Network Defense (CND), February 2011
- Department of the Navy (DON) DIACAP Handbook July 2008
- DON FISMA Guidance, March 2006



Best Practices





Best Practices



- PHASES 0-4
 - Mirrors the DIACAP Steps
 - Incorporates CA/ODAA IATS process steps
- Provides stakeholders with a clear picture
 - Produces clear/tangible artifacts at each phase
 - Each phase is dependant on the preceding step
 - Color coordinated to map to the schedule, for ease of use/tracking
 - Maps well to PORs, Enclaves, Joint Medical PORs, simply by adjusting which phase to start in
- C&A process is very complex and requires significant interaction between stakeholders



Best Practices



- The C&A team has developed a *DRAFT* Responsibility Assignment Matrix to map out each C&A Phase and Project Tasks (an abbreviated version will be displayed on the following several slides)
- Includes all stakeholders involved in the process:
 - Enclave and/or Program
 - Regional Staff
 - NAVMISSA EIA
 - BUMED M6
 - Office of the Certification Agent (CA)
 - Office of the Operational Designated Approval Authority (ODAA)
- Serves as foundation of the DRAFT NAVMED DIACAP Handbook



Best Practices



- The Responsibility Assignment Matrix, also referred to as a RASCI matrix, utilizes the following roles to describe participation within the Navy Medicine C&A process.
 - **R**esponsible – Those who perform the work to achieve the task. Typically there is only one role with this participation type within a RASCI chart, but others can be delegated to support this role (see below, Support)
 - **A**ccountable – Those who are ultimately answerable for the correct and thorough completion of the deliverable or task; only ONE accountable
 - **S**upport – Resources allocated to *Responsible* to provide assistance in task completion
 - **C**onsulted (Counsel) – Those whose opinions are sought, typically Subject Matter Experts; two way communication
 - **I**nformed – Those who are kept current/apprised of task progress and completion of task deliverables; one way communication



Best Practices



• Phase 0 – Roles & Responsibilities

		Enclave Stakeholders						Region	NAVMISSA EIA										
		System Administrator (SA)	User Representative (UR)	Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Commanding Officer (CO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	Mitigation and Remediation (MARS) Team	Mitigation and Remediation (MARS) Functional Lead	C&A QA Lead (FQNV)	ITCP Team	EIA Compliance Team	CV&V Team	CV&V Team Lead	EIA Department Head
Phase	C&A Project Tasks																		
Phase-0 Preparation (2 Weeks)	Create EIA C&A Workplan/Schedule				S		S	I	S	R	A	S		S			S	S	I
	Compile Previous Accreditation Documentation			S	S	S			R	A	I						I		
	Distribute Latest C&A Templates to TOE Owners			I	I				R	A					S	S		S	
	Acquire and Review most current DISA STIGs													S			R	A	
	Assemble DIACAP Team (EIA and TOE Owner)				S			S	S	S	A		S			S		S	I
	Conduct C&A Kick-Off (EIA Internal)			I	I			I	S	R	A	I		I	I	I	I		I
	Complete Scoping Sheet	S	S	S	A	S			S	S	S			C			S	C	I
	Initiate Implementation Plan				S				R	A	C			C					
	Register the Enclave in IATS								R	A	I								
	Create a Preliminary SIP				S				R	A									
	Confirm/Determine MAC and CL Level	S	S	R	A	S			C	C	C							C	



Best Practices



• Phase 1 – Roles & Responsibilities

		Enclave Stakeholders						Region	NAVMISSA EIA							
		System Administrator (SA)	User Representative (UR)	Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Commanding Officer (CO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	Mitigation and Remediation (MARS) Functional Lead	ITCP Team	EIA Compliance Team	CV&V Team Lead	EIA Department Head
Phase	C&A Project Tasks															
Phase I Planning and Preparation (4 weeks)	Conduct Phase I Kick-off	S	S	S	S	S	S	I	S	R	A	S		S	S	I
	Initiate the DIACAP Package															
	Formally announce DIACAP team				I			I	S	R	A	I		I	I	I
	Continue to finalize C&A Plan with TOE owner (IAM/PM/SO/etc.)															
	Document Enclave Mission Description	S	S	S	A	S			S	C	C					
	Create CONOPS Summary	S	S	S	A	S			S	C	C					
	Document Operating and Computing Environment	S	S	S	A	S			S	C	C					
	Document User Description and Clearances	S	S	S	A	S			S	C	C					
	Document Security Roles	S	S	S	A	S			S	C	C					
	Document/Update Hardware List	S	S	S	A	S			S	C	C					
	Document/Update Software List	S	S	S	A	S			S	C	C					
	Document Ports, Protocols, and Services	S	S	S	A	S			S	C	C					
	Create Architecture Diagram	S	S	S	A	S			S	C	C					
	Document Accreditation Boundary	S	S	S	A	S			S	C	C					
	Document/Update External Interfaces and Data Flow	S	S	S	A	S			S	C	C					
	Document/Update Contingency Plan	S	S	S	A	S			S	I	I		C			
	Document Threat Analysis/Threat Descriptions	S	S	S	A	S			S	C	C					
	Document Physical Security Measures/Facilities	S	S	S	A	S			S	C	C					
	Vulnerability Management Plan/IAVM Plan	S	S	S	A	S			S	I	I			C		
	Document/Update Life Cycle Management Plan	S	S	S	A	S			S	C	C					
	Document System-specific Acronyms	S	S	S	A	S			S	C	C					
	Document System-specific Definitions	S	S	S	A	S			S	C	C					
	C&A Tasks and Milestones	S	S	S	A	S			S	C	C					



Best Practices



• Phase 1 – Roles & Responsibilities (continued)

		Enclave Stakeholders					Region	NAVMISSA EIA						
		System Administrator (SA)	User Representative (UR)	Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	C&A QA Lead (FQNV)	CV&V Team	CV&V Team Lead	EIA Department Head
Phase	C&A Project Tasks													
Phase I Planning and Preparation (4 weeks)	Finalize IAC's Baseline/Assign IAC's and other Requirements													
	Determine other requirements and their associated IACs (HIPAA, Medical Devices, etc.)							S	S	C	C	S	A	C
	Update Initial IAC Implementation Plan and Validation Plan and Procedures							S	S	A	C	S	R	C
	Review IAC's with TOE (Enclave and POR)													
	Identify and Document Non-Applicable IACs		S	S	S	S		S	R	A	C		C	C
	Determine Inherited/ N/A' IACs		S	S	S	S		S	R	A	C		C	C
	Complete and Submit the DIP													
	Collect the DIP Components													
	Previous accreditation if available				R			C	A	C				
	Final IAC Implementation Plan		S	S	S	S		C	C	C	C	R	A	I
	Test Plan		S	S	S	S		C	C	C	C	R	A	I
	C&A Plan and associated documents	S	S	S	S	S		R	A	C	C			
	DIP Review and Concurrence													
	Review for Completeness and Accuracy							R	A	C	C		C	
	Complete and Submit DIP/Test Plan (new template) & Scope Sheet							S	R	A	S		S	I
	Schedule DIP Concurrence													
	EI DIP Review										A			
	CA DIP Review													
	DAA DIP Review													
	Hold formal DIP Concurrence Meeting				S			S	S	R	S	S	S	I
	Phase 1 - Closeout				I		I		S	A				I



Best Practices



• Phase 2 – Roles & Responsibilities

		Enclave Stakeholders						Region	NAVMISSA EIA										
		System Administrator (SA)	User Representative (UR)	Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Commanding Officer (CO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	Mitigation and Remediation (MARS) Team	Mitigation and Remediation (MARS) Functional Lead	C&A QA Lead (FQNV)	ITCP Team	EIA Compliance Team	CV&V Team	CV&V Team Lead	EIA Department Head
Phase	C&A Project Tasks																		
Implement & Validate IA Controls (6 Weeks)	Phase 2- Kickoff	S	S	S	S	S	I	I	S	S	S		S				R	A	I
	Execute DIP & Conduct Testing																		
	Execute DIP																		
	Execute IAC Implementation Plan	S	S	S	S	S			S	S	C			C			R	A	
	Verify Incorporation of IACs	S	S	S	S	S			S	S	C			C			R	A	
	Prepare Enclave/POR for C&A Testing	S	S	S	S	S			S	S	C			C			R	A	
	Confirm Validator (Test Team)																	A	I
	Validate Implementation of IACs (ST&E)																		
	Review C&A Plan	S	S	S	S	S			S	R	A			I	S	S		I	
	Identify and fix issues with Validation Plan and Procedures				S				S	S	S			C			R	A	
	Execute Validation Plan and Procedures	S	S	S	S	S			S	S	S			I			R	A	
	Compare test results against expected results	S	S	S	S	S			S	S	S			I			R	A	
	Categorize vulnerabilities by severity								S	S	S			C			R	A	
	Document assessment findings								S	S	S			C			R	A	I
	Review assessment findings with IA stakeholders				S				S	S	S			C			R	A	I
	Develop Scorecard								S	S	S			I			R	A	I
	Develop POA&M for Non-Compliant IACs				I				C	C	C			C			R	A	I
	Submit Test Results/POA&M/Scorecard/etc. to Mars Team			I	I	I			S	S	S	I	I				R	A	
	Phase 2 - Closeout				I		I	I	I	I	I	I	I				R	A	I



Best Practices



• Phase 3 – Roles & Responsibilities

		Enclave Stakeholders						Region	NAVMISSA EIA										
		System Administrator (SA)	User Representative (UR)	Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Commanding Officer (CO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	Mitigation and Remediation (MARS) Team	Mitigation and Remediation (MARS) Functional Lead	C&A QA Lead (FQNV)	ITCP Team	EIA Compliance Team	CV&V Team	CV&V Team Lead	EIA Department Head
Phase	C&A Project Tasks																		
Phase 3 C&A Package Submission (8 weeks)	Phase 3 - Kickoff	S	S	S	S	S	I	I	S	S	A	S	R					C	I
	Create Site Specific Mitigation Plan				S				S	S	S	R	A						S
	Perform On-site Mitigation Activities	S	S	S	S	S	I		S	S	S	R	A						I
	On-site Mitigation Activity Closeout			S	S	S	I			S	A	S	R						I
	POA&M Updated	S	S	S	S	S			R	A	C	S	S						
	Make Residual Risk Assessments	S	S	S	S	S			R	A	C	S	S	C					I
	Complete C&A Package																		
	Review/Update C&A Plan (and supporting artifacts, i.e. IAVM Plan)	S	S	S	S	S			R	A	S				S	S			
	Review/Update SIP	S	S	S	S	S			R	A	I								
	Review/Updated DIP	S	S	S	S	S			R	A	I								
	Upload C&A Package and all artifacts to IATS (IATS Step 2)				I				R	A	I			I					I
	Final Quality Assurance Review (in accordance with EII Bus. Rules)				S				S	S	A			R					
	Complete and Sign C&A Package Signature Page		R	S	R	S			A	S	S								
	Complete & Sign ITCP Signature Page		R	S	R	S			A	S	S				I				
	Complete & Sign Support and Sustainability Plan				R	S			A	S	S								
	Phase 3 - Closeout				I		I	I	S	R	A		S						I



Best Practices



• Collaboration– Roles & Responsibilities

		Enclave Stakeholders				Region	NAVMISSA EIA					BUMED M6			Certification Agent		ODAA	
		Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Commanding Officer (CO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	C&A QA Lead (FQNV)	EIA Department Head	EII C&A Representative	Chief, M62	BUMED CIO	BUMED Certification Agent (CA) Liaison	NAVY Certification Agent	BUMED Action Officer (AO)	DAA
Phase	C&A Project Tasks																	
EII-Collaboration (12 Weeks)	Pre-Collaboration																	
	Trigger ODAA /CA Review (IATS Step 3)							I	I	I	I	A			I		I	
	C&A Package review		S				S	S	A	C	I	A			R		R	
	C&A Package Comments Addressed	S	S	S			S	S	R	S	I				I		I	
	CD Letter Drafted/CA Liaison Concurrence		I					I	I	R	I	C	A		R			
	Collaboration Scheduled		I				I	I	I	I	I	A			I		I	
	Collaboration																	
	Final C&A Package Discussed/Reviewed		S				S	S	S	R		A			S		S	
	C&A Package Comments Addressed	S	S	S			S	R	A			C			C		C	
	E-Vote Scheduled/Requested (IATS Step 4)		I					I	I	I		A			I		I	
	E-Vote Conducted		S						S			A			S		S	
	CD Letter Signed (IATS Step 5)	S	S	S			S	S	S	C		S			A	R	I	
	Signed CA Letter passed to ODAA (IATS Step 6)		I			I	I	I	I		I	I	I		S	A	I	I
	ODAA AO drafts accreditation letter		I				I	I	I		I	I	I		I	I	R	A
	Accreditation Decision Made		I		I	I		I	I	I	I	I	I	I	I	I	S	A
	IATO/ATO issued																	
	Accreditation Letters distributed to TOE owners	I	I	I	I	I	S	S	S								R	A
	Accreditation Letters posted to IATS/IATS triggers updated	I	I	I	I	I	S	S	S								R	A

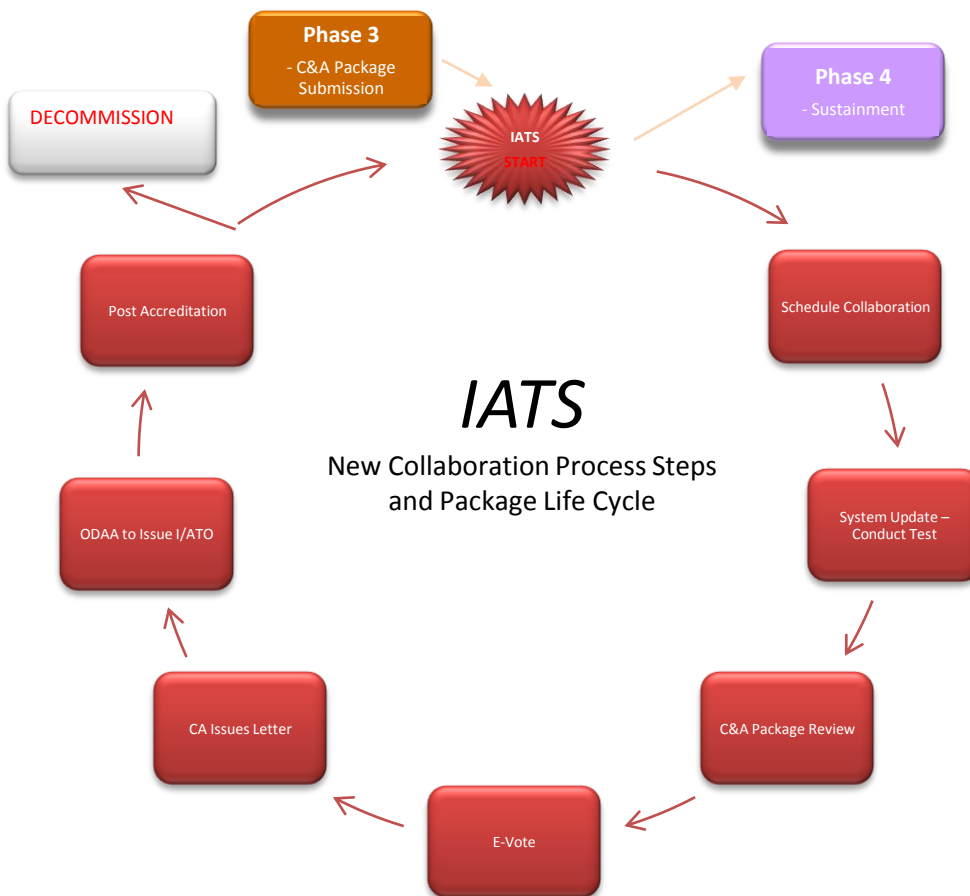


Best Practices



EII Collaboration Participants:

- EIA C&A Team
- Program Manager
- BUMED Validator
- Navy CA (Action Officer if app.)
- Navy ODAA (Action Officer)
- BUMED CIO (IA Representative)





Best Practices



• Phase 4 – Roles & Responsibilities

		Enclave Stakeholders						Region	NAVMISSA EIA								
		System Administrator (SA)	User Representative (UR)	Information Assurance Officer (IAO)	Information Assurance Manager (IAM)	Information Systems Officer (ISO)	Commanding Officer (CO)	Regional Information Systems Officer (RISO)	C&A Site POC	C&A Functional Site Lead	C&A Team Lead	C&A QA Lead (FQNV)	ITCP Team	EIA Compliance Team	CV&V Team	CV&V Team Lead	EIA Department Head
Phase	C&A Project Tasks																
Phase 4 Sustainment (Ongoing)	Phase 4 kickoff			S	S	S	I	I	S	R	A						I
	Monthly Scans	S	S	S	R	A		I									
	Conduct Annual Review	S	S	S	A	S		I			C					C	C
	Maintain and Report Compliance	S	S	S	A	S		I						C			I
	Monitor Enclave for Security Relevant Events				A			I									
	Monitor for Life Cycle and Accreditation Status C	S	S	S	A	S		I	S	S	S						
	Monitor Quality of IAC Implementation				S				C	C	C	A		S			
	Reaccredit				A		I	C	S	S	C	C					
	Assist additional evaluation as directed/required				S				S	S	C	C			S	S	I
	Decommission			S	A	S		S	S	S	S						I



Milestones / Timelines



- The initial or recertification C&A process takes approximately 32 weeks

Phase 0	2 Weeks
Phase – 1	4 Weeks
Phase – 2	6 Weeks
Phase – 3	8 Weeks
EII - Collaboration	12 Weeks
Phase – 4	Continuous



Challenges & Issues



- C&A takes a lot of time
- It requires special training/knowledge
- It involves many groups of people
- Frequently requires external assistance
- Schedules and/or priorities are subject to change
- C&A process is always in a state of evolution, must remain flexible
- It will always discover some level of unmitigated risk



Opportunities



- Improve knowledge and awareness of process
- Reduction of process cycle times
- Improved accountability for specific tasks within the C&A process
- Improved progress monitoring/tracking
- Utilize reciprocity when possible



Opportunities



- Reciprocity
 - What it is
 - ‘Certification Reciprocity’, acceptance of existing C&A package to serve as basis for Accreditation decision
 - Streamlined process to reduce duplication of effort
 - What it is not
 - Automatic acceptance of another DoD entity or organizations ATO letter
 - Guarantee that an existing ‘ATO’ will result in full Navy ATO
- It is working - as of 31 Dec 2011:
 - 5 ATOs (AHLTA, CHCS, HAIMS, CIS, ICDB) & 1 IATO (CCE)



Impact to Sites



- Increasing awareness of the C&A process and the roles and responsibility within, will require regular training/education be provided to the sites/program offices
 - Staff training/educational requirements funding
 - Enclave and Program personnel will need to dedicate more of their time to stay current with the ever-changing process and support the full scope of their C&A efforts



Summary



Today

- C&A process explained
- NAVMISS EIA is here to provide support during process

Tomorrow

- Implementation of IA lessons learned during C&A effort
- Improved IA sustainment and management of acceptable risk posture

Long-Term

- Migration to new C&A processes
- Move from point in time to continuous risk monitoring
- Implement new IA toolsets as they become available from DoD/DoN/BUMED



Questions





Evaluations



<http://www.surveymoz.com/s3/789671/tmims>

Evaluations

**Don't
FORGET!**





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